

DEFINITIONS  
To Accompany  
List of Defense Articles Exempted from Treaty Coverage

B.2 Defense Articles related to reduced observables or counter reduced observables is defined as

- a. Signature reduction (radio frequency (RF), infrared (IR), Electro-Optical, visual, ultraviolet (UV), acoustic, magnetic, RF emissions) of defense platforms, including systems, subsystems, components, materials, (including dual-purpose materials used for Electromagnetic Interference (EMI) reduction) technologies, and signature prediction, test and measurement equipment and software and material transmissivity/reflectivity prediction codes and optimization software.
- b. Electronically scanned array radar, high power radars, radar processing algorithms, periscope-mounted radar systems (PATRIOT), LADAR, multi-static and IR focal plane array-based sensors, to include systems, subsystems, components, materials and technologies.

B.3 Defense Articles related to sensor fusion beyond that required for display or identification correlation is defined techniques designed to automatically combine information from two or more sensors/sources for the purpose of target identification, tracking, designation, or passing of data in support of surveillance or weapons engagement. Sensor fusion involves sensors such as acoustic, infrared, electro optical, radio frequency, etc. Display or identification correlation refers to the combination of target detections from multiple sources for assignment of common target track designation.

B.4(i) Naval nuclear propulsion information is technical data that concerns the design, arrangement, development, manufacture, testing, operation, administration, training, maintenance, and repair of the propulsion plants of naval nuclear-powered ships and prototypes, including the associated shipboard and shore-based nuclear support facilities. Examples of Defense Articles covered by this exemption include nuclear propulsion plants and nuclear submarine technologies or systems; nuclear powered vessels (see USML Categories VI and XX)

B.4(ii) Examples of Defense Articles covered by this exemption include underwater acoustic vector sensors; acoustic reduction; off-board, underwater, active and passive sensing, propeller/propulsor technologies; fixed/mobile/floating/powered detection systems which include in-buoy signal processing for target detection and classification; autonomous underwater vehicles capable of long endurance in ocean environments (manned submarines excluded); automated control algorithms embedded in on-board

autonomous platforms which enable (a) group behaviors for target detection and classification, (b) adaptation to the environment or tactical situation for enhancing target detection and classification; "intelligent autonomy" algorithms which define the status, group (greater than 2) behaviors, and responses to detection stimuli by autonomous, underwater vehicles; and low frequency, broad-band "acoustic color", active acoustic "fingerprint" sensing for the purpose of long range, single pass identification of ocean bottom objects, buried or otherwise. (Controlled under Category XI(a), (1) and (2) and in (b), (c), and (d))

B.4(iii) Examples of Defense Articles covered by this exemption includes manned or unmanned, tethered or untethered and swimmer delivery vehicles (controlled under Category XX(a) and (b))

B.5 Examples of gas turbine engine hot section exempted Defense Article components and technology are combustion chambers/liners; high pressure turbine blades, vanes, disks and related cooled structure; cooled low pressure turbine blades, vanes, disks and related cooled structure; advanced cooled augmenters; and advanced cooled nozzles. Examples of gas turbine engine hot section developmental technologies are Integrated High Performance Turbine Engine Technology (IHPTET), Versatile, Affordable Advanced Turbine Engine (VAATE), Ultra-Efficient Engine Technology (UEET).

B. 6 Examples of countermeasures and counter-countermeasures related to Defense Articles not exportable under the Treaty are:

- a. IR countermeasures
- b. Classified techniques and capabilities;
- c. Exports for precision radio frequency location that directly or indirectly supports fire control and is used for situation awareness, target identification, target acquisition, and weapons targeting and Radio Direction Finding (RDF) capabilities. Precision RF location is defined as angle of arrival accuracy of less than five degrees (RMS) and RF emitter location of less than ten percent range error;
- d. Providing the capability to reprogram.
- e. Underwater acoustics, active and passive countermeasure and counter-countermeasures

B.16 Other Defense Articles not covered by the UK Munitions List (UK ML) or Annex 4 to the UK Dual Use List that the US controls under the USML are as follows:

- a. rockets, designed or modified for non-military applications (Note: the UK ML controls only those rockets specially designed for military use, MTCR controls only those with a range greater than 300 kilometers; the USML controls sounding rockets that fall below either control under USML Category IV (a));

- b. explosives and fuels containing metals or alloys controlled in USML Category V (c) (6) (i) and (ii), other than aluminum, as controlled in USML Category V (c) (6) (iii);
- c. pyrotechnics and pyrophorics specifically formulated for military purposes to enhance or control radiated energy in any part of the IR spectrum as described in USML Category V (c) (7);
- d. Bis-2, 2-dinitropropylnitrate (BDNPN) controlled in USML Category V (d) (3);
- e. harbor entrance detection devices controlled in USML Category VI (d);
- f. vehicles fitted with, or designed or modified to be fitted with, a plough or flail for the purpose of land mine clearance that would otherwise be controlled in USML Category VII;
- g. ground effect machines (GEMS) controlled in USML Category VIII (g);
- h. electronic equipment when not specially designed for military use (i.e., certain gravity gradiometers, radars, laser communications devices, that the US Government has determined are controlled under the USML Category XI, but which were not “specially designed for military use”) which the UK controls as “dual use”;
- i. carbon/carbon materials controlled in USML Category XIII (d);
- j. concealment and deception equipment and materials controlled in USML Category XIII (g);
- k. energy conversion devices controlled in USML Category XIII (h);
- l. metal embrittling agents controlled in USML Category XIII (i) as defined further in Category XIII (m)(2);
- m. the following materials controlled in USML Category XIV:
  - i. O, O-diethyl S-[2(diethylamino)ethyl] phosphorothiolate and corresponding alkylated or protonated salts in XIV (a) (2);
  - ii. Methylphosphonyl dichloride in XIV (c) (5);
  - iii. Ethyldichloroarsine (ED) in XIV (a) (3) (iv);
  - iv. Methylchloroarsine (MD) in XIV (a) (3) (v);
  - v. Diphenylchloroarsine (DA) in XIV (a) (4) (ii);
  - vi. Diphenylcyanoarsine (DC) in XIV (a) (4) (iii);
  - vii. Adamsite (diphenylamine chloroarsine or DM) in XIV (d) (1);
  - viii. Dibromodimethylether in XIV (d) (6);
  - ix. Dichlorodimethylether in XIV (d) (7);
  - x. Ethyldibromoarsine in XIV (d) (8);
  - xi. Bromoacetone in XIV (d) (9);
  - xii. Bromomethylethylketone in XIV (d) (10);
  - xiii. Iodoacetone in XIV (d) (11);
  - xiv. Phenylcarbylaminechloride in XIV (d) (12);
  - xv. Ethyliodoacetate in XIV (d) (13);

- xvi. Agent Orange (2,4,5-trichlorophenoxyacetic acid mixed with 2,4-dichlorophenoxyacetic acid) in XIV (e) (1); and
- xvii. LNF (butyl-2-chloro-4-fluorophenoxyacetate) in XIV (e) (2).